



DEPARTMENT OF THE AIR FORCE  
59TH MEDICAL WING (AETC)  
JOINT BASE SAN ANTONIO - LACKLAND TEXAS



15 JUNE 2017

MEMORANDUM FOR SGOZ

ATTN: MAJ BRYANT J WEBBER

FROM: 59 MDW/SGVU

SUBJECT: Professional Presentation Approval

1. Your paper, entitled **Athletic Trainer Integration in U.S. Air Force Basic Training** presented at/published to **SURF 2017 (San Antonio TX, June 16, 2017)** in accordance with MDWI 41-108, has been approved and assigned local file #**17260**.
2. Pertinent biographic information (name of author(s) title, etc.) has been entered into our computer file. Please advise us (by phone or mail) that your presentation was given. At that time, we will need the date (month, day and year) along with the location of your presentation. It is important to update this information so that we can provide quality support for you, your department, and the Medical Center commander. This information is used to document the scholarly activities of our professional staff and students, which is an essential component of Wilford Hall Ambulatory Surgical Center (WHASC) internship and residency programs.
3. Please know that if you are a Graduate Health Sciences Education student and your department has told you they cannot fund your publication, the 59th Clinical Research Division may pay for your basic journal publishing charges (to include costs for tables and black and white photos). We cannot pay for reprints. If you are a 59 MDW staff member, we can forward your request for funds to the designated Wing POC at the Chief Scientist's Office, Ms. Alice Houy, office phone: 210-292-8029; email address: alice.houy.civ@mail.mil.
4. Congratulations, and thank you for your efforts and time. Your contributions are vital to the medical mission. We look forward to assisting you in your future publication/presentation efforts.

LINDA STEEL-GOODWIN, Col, USAF, BSC  
Director, Clinical Investigations & Research Support

## PROCESSING OF PROFESSIONAL MEDICAL RESEARCH/TECHNICAL PUBLICATIONS/PRESENTATIONS

### INSTRUCTIONS

#### USE ONLY THE MOST CURRENT 59 MDW FORM 3039 LOCATED ON AF E-PUBLISHING

1. The author must complete page two of this form:
  - a. In Section 2, add the funding source for your study [ e.g., 59 MDW CRD Graduate Health Sciences Education (GHSE) (SG5 O&M); SG5 R&D; Tri-Service Nursing Research Program (TSNRP); Defense Medical Research & Development Program (DMRDP); NIH; Congressionally Directed Medical Research Program (CDMRP) ; Grants; etc.]
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2. Print your name, rank/grade, sign and date the form in the author's signature block or use an electronic signature.
3. Attach a copy of the 59 MDW IRB or IACUC approval letter for the research related study. If this is a technical publication/presentation, state the type (e.g. case report, QA/QI study, program evaluation study, informational report/briefing, etc.) in the "Protocol Title" box.
4. Attach a copy of your abstract, paper, poster and other supporting documentation.
5. Save and forward, via email, the processing form and all supporting documentation to your unit commander, program director or immediate supervisor for review/approval.
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  - a. Print their name, rank/grade, title; sign and date the form in the approving authority's signature block or use an electronic signature.
7. Submit your completed form and all supporting documentation to the CRD for processing (59crdpubspres@us.af.mil). **This should be accomplished no later than 30 days before final clearance is required to publish/present your materials.** If you have any questions or concerns, please contact the 59 CRD/Publications and Presentations Section at 292-7141 for assistance.
8. The 59 CRD/Publications and Presentations Section will route the request form to clinical investigations, 502 ISG/JAC (Ethics Review) and Public Affairs (59 MDW/PA) for review and then forward you a final letter of approval or disapproval.
9. Once your manuscript, poster or presentation has been approved for a one-time public release, you may proceed with your publication or presentation submission activities, as stated on this form. **Note:** For each new release of medical research or technical information as a publication/presentation, a new 59 MDW Form 3039 must be submitted for review and approval.
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11. The Joint Ethics Regulation (JER) DoD 5500.07-R, *Standards of Conduct*, provides standards of ethical conduct for all DoD personnel and their interactions with other non-DoD entities, organizations, societies, conferences, etc. Part of the Form 3039 review and approval process includes a legal ethics review to address any potential conflicts related to DoD personnel participating in non-DoD sponsored conferences, professional meetings, publication/presentation disclosures to domestic and foreign audiences, DoD personnel accepting non-DoD contributions, awards, honoraria, gifts, etc. The specific circumstances for your presentation will determine whether a legal review is necessary. **If you (as the author) or your supervisor check "NO" in block 17 of the Form 3039, your research or technical documents will not be forwarded to the 502 ISG/JAC legal office for an ethics review.** To assist you in making this decision about whether to request a legal review, the following examples are provided as a guideline:

For presentations before professional societies and like organizations, the 59 MDW Public Affairs Office (PAO) will provide the needed review to ensure proper disclaimers are included and the subject matter of the presentation does not create any cause for DoD concern.

If the sponsor of a conference or meeting is a DoD entity, an ethics review of your presentation is not required, since the DoD entity is responsible to obtain all approvals for the event.

If the sponsor of a conference or meeting is a non-DoD commercial entity or an entity seeking to do business with the government, then your presentation should have an ethics review.

If your travel is being paid for (in whole or in part) by a non-Federal entity (someone other than the government), a legal ethics review is needed. These requests for legal review should come through the 59 MDW Gifts and Grants Office to 502 ISG/JAC.

If you are receiving an honorarium or payment for speaking, a legal ethics review is required.

If you (as the author) or your supervisor check "YES" in block 17 of the Form 3039, your research or technical documents will be forwarded simultaneously to the 502 ISG/JAC legal office and PAO for review to help reduce turn-around time. If you have any questions regarding legal reviews, please contact the legal office at (210) 671-5795/3365, DSN 473.

**NOTE:** All abstracts, papers, posters, etc., should contain the following disclaimer statement:

**"The views expressed are those of the [author(s)] [presenter(s)] and do not reflect the official views or policy of the Department of Defense or its Components"**

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**"The voluntary, fully informed consent of the subjects used in this research was obtained as required by 32 CFR 219 and DODI 3216.02\_AFI 40-402."**

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**40-401\_IP :**

**"The experiments reported herein were conducted according to the principles set forth in the National Institute of Health Publication No. 80-23, Guide for the Care and Use of Laboratory Animals and the Animal Welfare Act of 1966, as amended."**

PROCESSING OF PROFESSIONAL MEDICAL RESEARCH/TECHNICAL PUBLICATIONS/PRESENTATIONS			
1. TO: CLINICAL RESEARCH	2. FROM: (Author's Name, Rank, Grade, Office Symbol)	3. GME/GHSE STUDENT:	4. PROTOCOL NUMBER:
	Bryant J. Webber, Maj, USAF, MC, 559 THLS/SGOZ	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	20150051N
5. PROTOCOL TITLE: (NOTE: For each new release of medical research or technical information as a publication/presentation, a new 59 MDW Form 3039 must be submitted for review and approval.)			
Athletic Trainer Integration in U.S. Air Force Basic Training			
6. TITLE OF MATERIAL TO BE PUBLISHED OR PRESENTED:			
Athletic Trainer Integration in U.S. Air Force Basic Training			
7. FUNDING RECEIVED FOR THIS STUDY? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO FUNDING SOURCE: CDMRP			
8. DO YOU NEED FUNDING SUPPORT FOR PUBLICATION PURPOSES: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
9. IS THIS MATERIAL CLASSIFIED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
10. IS THIS MATERIAL SUBJECT TO ANY LEGAL RESTRICTIONS FOR PUBLICATION OR PRESENTATION THROUGH A COLLABORATIVE RESEARCH AND DEVELOPMENT AGREEMENT (CRADA), MATERIAL TRANSFER AGREEMENT (MTA), INTELLECTUAL PROPERTY RIGHTS AGREEMENT ETC.? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO NOTE: If the answer is YES then attach a copy of the Agreement to the Publications/Presentations Request Form.			
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<input type="checkbox"/> 11a. PUBLICATION/JOURNAL (List intended publication/journal.)			
<input type="checkbox"/> 11b. PUBLISHED ABSTRACT (List intended journal.)			
<input checked="" type="checkbox"/> 11c. POSTER (To be demonstrated at meeting: name of meeting, city, state, and date of meeting.) SURF 2017 (San Antonio, TX, June 16, 2017) (please note we have written permission from the trainee and 737 TRG for the photo)			
<input type="checkbox"/> 11d. PLATFORM PRESENTATION (At civilian institutions: name of meeting, state, and date of meeting.)			
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12. HAVE YOUR ATTACHED RESEARCH/TECHNICAL MATERIALS BEEN PREVIOUSLY APPROVED TO BE PUBLISHED/PRESENTED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO ASSIGNED FILE # 16242 DATE July 15, 2016			
13. EXPECTED DATE WHEN YOU WILL NEED THE CRD TO SUBMIT YOUR CLEARED PRESENTATION/PUBLICATION TO DTIC NOTE: All publications/presentations are required to be placed in the Defense Technical Information Center (DTIC).			
DATE May 26, 2017			
14. 59 MDW PRIMARY POINT OF CONTACT (Last Name, First Name, M.I., email) Webber, Bryant J. (bryant.j.webber.mil@mail.mil)		15. DUTY PHONE/PAGER NUMBER 671-4087	
16. AUTHORSHIP AND CO-AUTHOR(S) List in the order they will appear in the manuscript.			
LAST NAME, FIRST NAME AND M.I.	GRADE/RANK	SQUADRON/GROUP/OFFICE SYMBOL	INSTITUTION (If not 59 MDW)
a. Primary/Corresponding Author Fisher, Reid A.	Ctr		Univ of the Incarnate Word
b. Esparza, Shandra D.	Ctr		Univ of the Incarnate Word
c. Webber, Bryant J.	O-4	559 THLS/ 559 MDG/ SGOZ	
d. Pawlak, Mary T.	O-4	559 THLS/ 559 MDG/ SGOZ	
e. Nye, Nathaniel S.	O-4	559 THLS/ 559 MDG/ SGOZ	
17. IS A 502 ISG/JAC ETHICS REVIEW REQUIRED (JER DOD 5500.07-R)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
I CERTIFY ANY HUMAN OR ANIMAL RESEARCH RELATED STUDIES WERE APPROVED AND PERFORMED IN STRICT ACCORDANCE WITH 32 CFR 219, AFMAN 40-401_IP, AND 59 MDW 41-108. I HAVE READ THE FINAL VERSION OF THE ATTACHED MATERIAL AND CERTIFY THAT IT IS AN ACCURATE MANUSCRIPT FOR PUBLICATION AND/OR PRESENTATION.			
18. AUTHOR'S PRINTED NAME, RANK, GRADE Bryant J. Webber, Maj, O-4	19. AUTHOR'S SIGNATURE WEBBER.BRYANT.J.1270119383		20. DATE April 13, 2017
21. APPROVING AUTHORITY'S PRINTED NAME, RANK, TITLE Maria J. Belmonte, Lt Col, O-5, Trainee Health Flight/CC	22. APPROVING AUTHORITY'S SIGNATURE BELMONTE.MARIA.J.1022954527		23. DATE April 14, 2017

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TO: Clinical Research Division 59 MDW/CRD Contact 292-7141 for email instructions.	24. DATE RECEIVED June 12, 2017	25. ASSIGNED PROCESSING REQUEST FILE NUMBER 17260
26. DATE REVIEWED 13 Jun 2017		27. DATE FORWARDED TO 502 ISG/JAC

 28. AUTHOR CONTACTED FOR RECOMMENDED OR NECESSARY CHANGES:  NO  YES If yes, give date. 13 Jun 2017  N/A

 29. COMMENTS  APPROVED  DISAPPROVED

The poster presentation is approved. The author revised his poster to reflect affiliations of each investigator and to state proprietary information was not being released.

 30. PRINTED NAME, RANK/GRADE, TITLE OF REVIEWER  
Rocky Calcote, PhD, Clinical Research Administrator

31. REVIEWER SIGNATURE

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 42. PRINTED NAME, RANK/GRADE, TITLE OF REVIEWER  
Kevin Iinuma, SSgt/E-5, 59 MDW Public Affairs

43. REVIEWER SIGNATURE

 IINUMA.KEVIN.MITSUGU.1296227  
613

 44. DATE  
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46. SENIOR AUTHOR NOTIFIED BY PHONE OF APPROVAL OR DISAPPROVAL

 47. COMMENTS  APPROVED  DISAPPROVED



# Athletic Trainer Integration in U.S. Air Force Basic Training

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<sup>3</sup>Injury Prevention Research Laboratory, Consortium for Health and Military Performance, Uniformed Services University of the Health Sciences, Bethesda, Maryland

**PURPOSE**  
To assess the impact of embedded athletic trainers within basic military training on operational efficiency within the U.S. Air Force.

## RATIONALE AND SIGNIFICANCE

As a leading cause of morbidity among U.S. military members and trainees, musculoskeletal injuries have a major impact on both current and future operational readiness.<sup>1</sup>

### U.S. Air Force Basic Military Training (BMT)

• The injury incidence density rate is 18.3 per 1,000 person-weeks (29.4 for females and 15.1 for males).<sup>2</sup>

• The injury period prevalence for the 7.5-week training course is 12.5%.<sup>2</sup>

• The stress fracture period prevalence is 1.0% (1.9% for females and 0.8% for males).<sup>3</sup>

• Nearly half (47%) of all medical attrition from training is attributed to a musculoskeletal injury.<sup>2</sup>

• Injured trainees are 3.0 times (95% CI: 2.8, 3.2) as likely to be discharged as their non-injured peers.<sup>2</sup>

• Injured trainees who graduate are 2.9 times (95% CI: 2.7, 3.0) as likely to graduate late as compared to their non-injured peers.<sup>2</sup>

• Injuries incur \$21.8 million in direct and indirect costs annually, not including long-term disability costs.<sup>2</sup>

## HYPOTHESES

Athletic trainers have been used by all U.S. military branches, although published data on their effectiveness are limited.<sup>4</sup> We hypothesized that embedded certified athletic trainers with sports medicine physician oversight would improve outcomes in Air Force BMT in attrition, get fit referrals, and reduced stress fracture rates.

## METHODS

Investigators from the 559 Medical Group and the Ilia Faye Miller School of Nursing and Health Professions at the University of the Incarnate Word partnered to design a community intervention trial to test these hypotheses. We secured funding through the Congressionally Directed Medical Research Program's Fiscal Year 2014 Clinical Research Initiative Intramural Research Award on Military Training Injuries (award DM140461) for a 30 month intervention. After establishing a clinic in the 3223<sup>rd</sup> training squadron with permission of the 737<sup>th</sup> training wing we hired two full-time athletic trainers to provide musculoskeletal care to the trainees of the 3223<sup>rd</sup> squadron self-reporting with pain. Rates of trainee attrition, on-time graduation, get-fit referrals, and stress fracture rates were tracked.

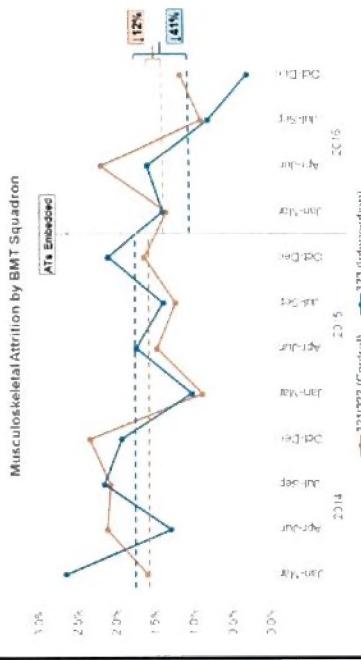
## RESULTS

### Preliminary Results for year 1

#### • Trainees

- Intervention – 3223<sup>rd</sup> squadron – 7,619 trainees
- Control – 321/322<sup>nd</sup> squadrons – 11,695 trainees

	Intervention (323 TRS)	Control (321/322 TRS)	Intervention vs Ctrl RR (95% CI)
Overall Attrition	5.4%	6.8%	0.75 (0.71, 0.89)
Musculoskeletal Attrition	1.0%	1.3%	0.75 (0.57, 0.98)
Get Fit Referrals	1.5%	1.4%	1.08 (0.85, 1.37)
Stress Fracture Rate	2.42	2.87	0.84 (0.66, 1.08)

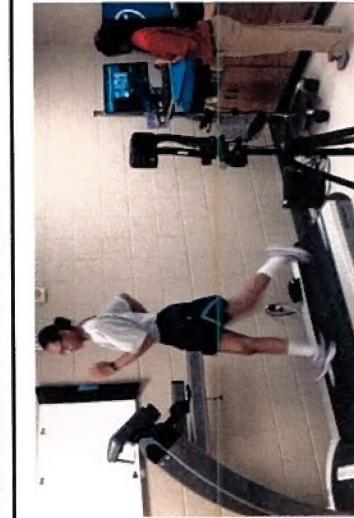


## CONCLUSIONS

Athletic training integration has effectively improved measures of operational efficiency in basic military training. Further significant impact is anticipated through the next two years of grant activity.

### References:

- (1) MSMR 2016; 23(4):2-27
- (2) Nye J, Athl Training 2016; in press
- (3) Nye J, Sports Health 2016 Mar 4; pii: 1941738116635558. [Epub ahead of print]
- (4) Knapik et al, Epidemiological Report No. S.0007856-11, October 2012.



The views expressed are those of the authors and do not reflect the official views or policy of the Department of Defense or its Components

No proprietary information is being released to the public